10/612,422

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=> file reg
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

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DICTIONARY FILE UPDATES: 23 MAR 2007 HIGHEST RN 928114-47-0

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=>
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L1 STRUCTURE UPLOADED

=> s l1 full
FULL SEARCH INITIATED 15:56:21 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 65004 TO ITERATE

100.0% PROCESSED 65004 ITERATIONS 6 ANSWERS
SEARCH TIME: 00.00.02

L2 6 SEA SSS FUL L1

=> file caplu
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	172.10	172.31

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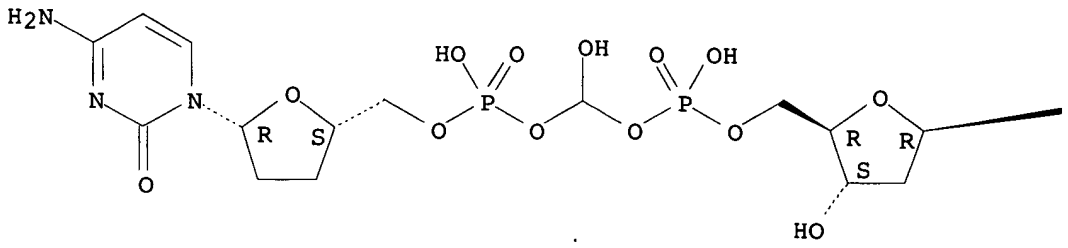
FILE COVERS 1907 - 25 Mar 2007 VOL 146 ISS 14
FILE LAST UPDATED: 23 Mar 2007 (20070323/ED)


```
=> s l2
L3            5 L2

=> s l3 and polyanion?
          7967 POLYANION?
L4            0 L3 AND POLYANION?

=> d l3 bib abs hitstr 1-5
```

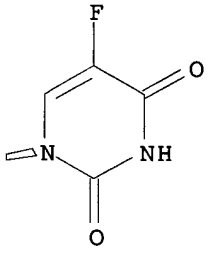
L3 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2005:467291 CAPLUS
DN 143:109187
TI A Novel Polypyrimidine Antitumor Agent FdUMP[10] Induces Thymineless Death with Topoisomerase I-DNA Complexes
AU Liao, Zhi-Yong; Sordet, Olivier; Zhang, Hong-Liang; Kohlhagen, Glenda; Antony, Smitha; Gmeiner, William H.; Pommier, Yves
CS Laboratory of Molecular Pharmacology, Center for Cancer Research, National Cancer Institute, NIH, Bethesda, MD, 20892-4255, USA
SO Cancer Research (2005), 65(11), 4844-4851
CODEN: CNREA8; ISSN: 0008-5472
PB American Association for Cancer Research
DT Journal
LA English
AB FdUMP[10], a 10mer of 5-fluoro-2'-deoxyuridine 5'-monophosphate (FdUMP), the thymidylate synthase inhibitory metabolite of 5-fluorouracil (FU), is most closely correlated with the DNA topoisomerase I (Top1) inhibitor camptothecin in the National Cancer Institute COMPARE anal., but not with FU. FdUMP[10] exhibits more potent antiproliferative activity than FdUMP or 5-fluoro-2'-deoxyuridine (FdU) and is markedly more active than FU. Camptothecin-resistant P388/CPT45 cells lacking Top1 are cross-resistant to FdUMP[10] as well as to FdUMP, FdU, and the thymidylate synthase inhibitor raltitrexed (Tomudex). FdUMP[10] induces DNA single-strand breaks and cellular Top1-DNA complexes. Such complexes are also observed in response to FdUMP, FdU, raltitrexed, and FU. The FdUMP[10]-induced Top1-DNA complexes are not inhibited by the caspase inhibitor z-VAD-fmk and form independently of apoptotic DNA fragmentation, indicating that they do not correspond to apoptotic Top1-DNA complexes. In biochem. assay, Top1 is directly trapped at uracil and FdU misincorporation sites. The authors propose that FdUMP[10] damages DNA by trapping Top1 at uracil and FdU misincorporation sites resulting from thymidylate synthase inhibition and thymine depletion.
IT 857502-90-0, NSC 704533
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(novel polypyrimidine antitumor agent FdUMP[10] induces thymineless death with topoisomerase I-DNA complexes)
RN 857502-90-0 CAPLUS
CN Uridine, 2',3'-dideoxycytidylyloxy(hydroxymethylene)oxyphosphinico-(5'→5')-2'-deoxy-5-fluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



RE.CNT 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1987:419872 CAPLUS
DN 107:19872
TI Phosphonate analogs of diadenosine 5',5'''-P1,P4-tetraphosphate as substrates or inhibitors of prokaryotic and eukaryotic enzymes degrading dinucloside tetraphosphates
AU Guranowski, Andrzej; Biryukov, Alexander; Tarussova, Natalia B.; Khomutov, Radii M.; Jakubowski, Hieronim
CS Inst. Biochem., Acad. Agric., Poznan, PL-60-637, Pol.
SO Biochemistry (1987), 26(12), 3425-9
CODEN: BICHAW; ISSN: 0006-2960
DT Journal
LA English
AB The substrate specificity of prokaryotic and eukaryotic diadenosine 5',5'''-P1,P4-tetraphosphate (AppppA)-degrading enzymes was investigated with phosphonate analogs of AppppA. App(CH2)ppA (I), App(CHBr)ppA (II), and Appp(CH2)pA (III), but not Ap(CH2)pp(CH2)pA (IV), were substrates for lupine AppppA hydrolase (EC 3.6.1.17) and phosphodiesterase I (EC 3.1.4.1). None of the 4 analogs was hydrolyzed by bacterial AppppA hydrolase (EC 3.6.1.41), and only III was degraded by yeast AppppA phosphorylase (EC 2.7.7.53). The analogs were competitive inhibitors of all 4 enzymes. The affinity of IV was 3-40-fold lower than that of analogs I-III for all 4 enzymes. The introduction of 1 methylene group (as in I and III) [or bromomethylene group (as in II)] into AppppA resulted in a 3-15-fold increase of its affinity for lupine and Escherichia coli AppppA hydrolases. The same modifications only negligibly (10-30%) affected its affinity for yeast AppppA phosphorylase and decreased its affinity for lupine phosphodiesterase I .apprx.2.5-fold. The data provide further evidence for heterogeneity among catalytic sites of all 4 AppppA-degrading enzymes.
IT 108562-30-7 108562-31-8
RL: BIOL (Biological study)

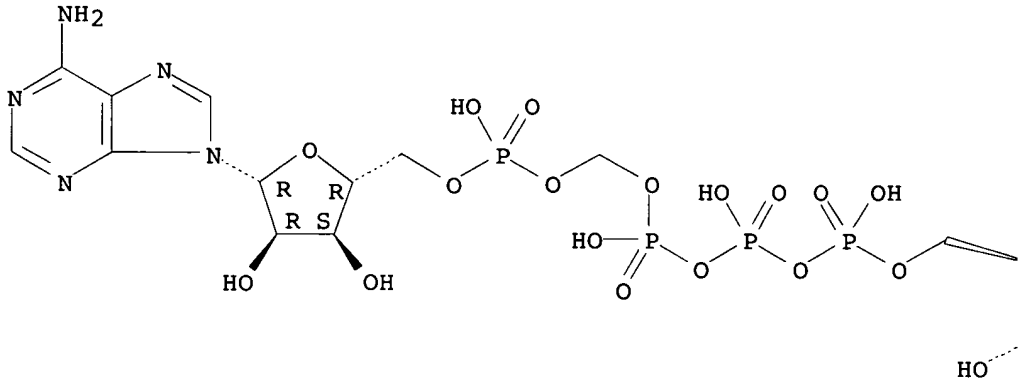
(diadenosine tetraphosphate-degrading enzymes specificity for, of lupine and microorganisms)

RN 108562-30-7 CAPLUS

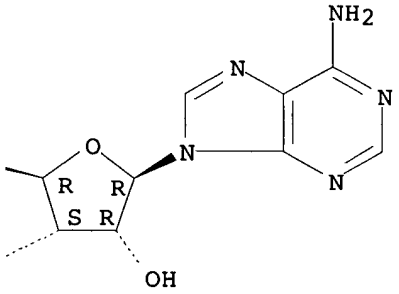
CN Adenosine 5'-(tetrahydrogen triphosphate), P''-(hydroxymethyl) ester, 5'-(hydrogen 5'-adenylate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

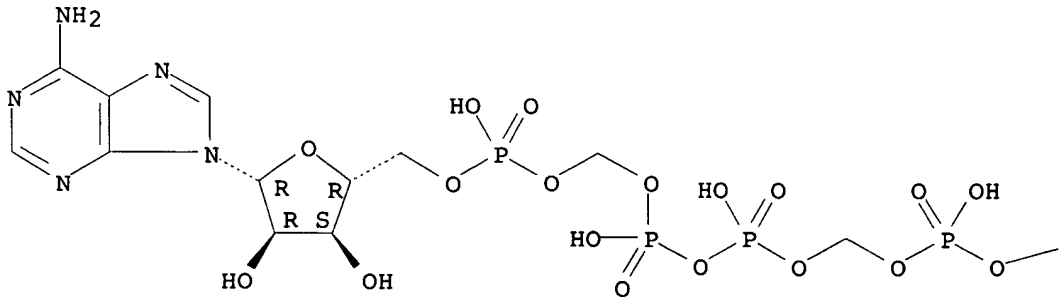


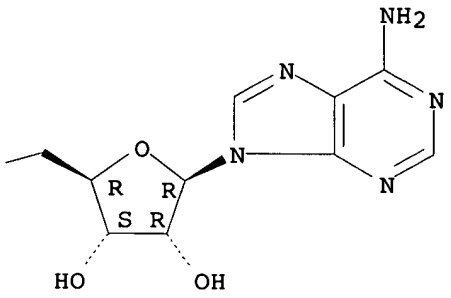
RN 108562-31-8 CAPLUS

CN 5'-Adenylic acid, P,P'-(3,5-dihydroxy-3,5-dioxido-2,4,6-trioxa-3,5-diphosphaheptane-1,7-diyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

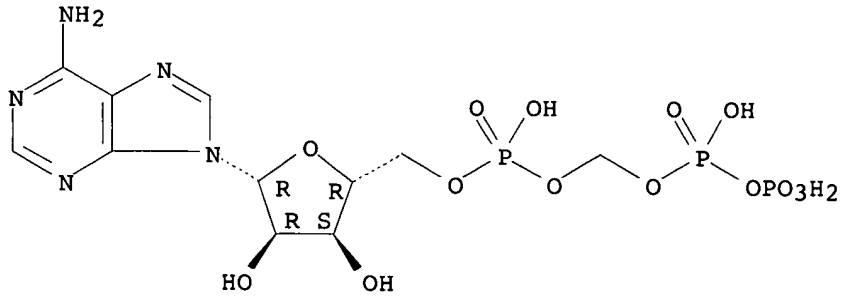
PAGE 1-A





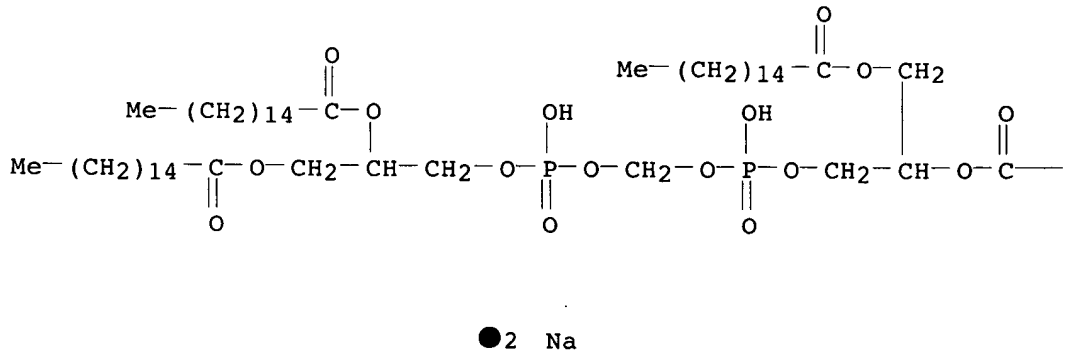
L3 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1974:67749 CAPLUS
DN 80:67749
TI Ouabain-receptor interactions in (sodium-potassium ion)-ATPase preparations. II. Effect of cations and nucleotides on rate constants and dissociation constants
AU Erdmann, Erland; Schoner, Wilhelm
CS Inst. Biochem. Endokrinol., Univ. Giessen, Giessen, Fed. Rep. Ger.
SO Biochimica et Biophysica Acta, Biomembranes (1973), 330(3), 302-15
CODEN: BBBMBS; ISSN: 0005-2736
DT Journal
LA English
AB The action of ATP and its analogs, as well as the effects of alkali ions, were studied in their action on the ouabain receptor. One single ouabain receptor with a dissociation constant (KD) of 13nM was found in the presence of Mg2+ + inorg. phosphate (Pi) and (Na+ + Mg2+ + ATP). The pH changes < pH 7.4 did not affect the ouabain receptor. Ouabain binding required Mg2+, where a curved line in the Scatchard plot appeared. The affinity of the receptor for ouabain was decreased by K+ and its congeners, by Na+ in the presence of (Mg2+ + Pi), and by ATP analogs. Ca2+ antagonized the action of K+ on ouabain binding. It was concluded that the ouabain receptor exists in a low affinity and a high affinity conformational state. The equilibrium between both states is influenced by ligands of (Na+ + K+)-ATPase. With 3mM Mg2+, a mixture between both conformational states is assumed to exist (curved line in the Scatchard plot).
IT 51407-25-1
RL: BIOL (Biological study)
(ATPase binding of ouabain response to)
RN 51407-25-1 CAPLUS
CN 5'-Adenylic acid, mono(3,5,5-trihydroxy-3,5-dioxido-2,4-dioxa-3,5-diphosphapent-1-yl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L3 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1968:418560 CAPLUS
DN 69:18560
TI Immunochemical studies of phospholipids. II. Synthesis of cardiolipin and its analogs
AU Inoue, Keizo; Nojima, Shoshichi
CS Fac. Pharm. Sci., Univ. Tokyo, Tokyo, Japan
SO Chemical & Pharmaceutical Bulletin (1968), 16(1), 76-8
CODEN: CPBTAL; ISSN: 0009-2363
DT Journal
LA English
AB Bis(dipalmitoyl D,L-α-glycerylphosphoryl)-1,3-glycerol disodium salt was synthesized by the condensation of the Ag salt of dipalmitoyl D,L-α-glycerophosphoric acid benzyl ester (I) with 1,3-diiodopropanol benzyl ether, followed by debenzylation with NaI and hydrogenolysis with Pd black. Bis(dipalmitoyl D,L-α-glycerylphosphoryl)-1,5-pentanediol disodium salt, bis(dipalmitoyl D,L-α-glycerylphosphoryl)-1,4-butanediol disodium salt, bis(dipalmitoyl D,L-α-glycerylphosphoryl)-1,2-ethanediol disodium salt, and bis(dipalmitoyl D,L-α-glycerylphosphoryl)methanediol disodium salt were synthesized similarly by the condensation of the silver salt of I with alkyl diiodide or dibromide, followed by debenzylation with NaI. Bis(benzylphosphoryl)-1,3-propanediol disodium was synthesized by condensation of Ag dibenzyl phosphate with alkyl diiodide, followed by debenzylation with NaI.
IT 18558-51-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 18558-51-5 CAPLUS
CN Palmitin, 1,2-di-, dihydrogen phosphate, methylene ester, disodium salt, DL- (8CI) (CA INDEX NAME)

PAGE 1-A



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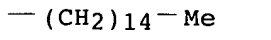
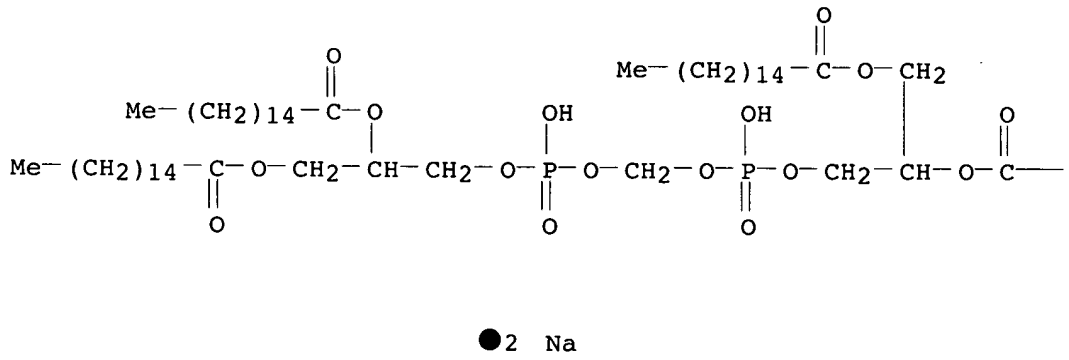
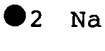
PAGE 1-B



L3 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1967:515297 CAPLUS
DN 67:115297
TI Immunochemical studies of phospholipids. I. Reactivity of various synthetic cardiolipin derivatives with Wassermann antibody
AU Inoue, Keizo; Nojima, Shoshichi
CS Univ. Tokyo, Tokyo, Japan
SO Chemistry and Physics of Lipids (1967), 1(4), 360-7
CODEN: CPLIA4; ISSN: 0009-3084
DT Journal
LA English
AB The reactivity of synthetic cardiolipin (I) analogs with pooled syphilitic serum was tested both by complement fixation and microflocculation tests. With palmitoyl groups, the reactivity was the same as that of beef heart I. Deoxycardiolipin (II) and O-benzoylcardiolipin had low activity, as did analogs with one phosphate group (D,L-α-dipalmitoyl bisphosphatidic acid). Bisphosphatidic acids bound by -(CH2)n- showed highest reactivity for n = 3 (II). The synthetic D,L-I was as active as natural I. Thus the determinant portions of the mol. appeared to be the β-OH and the 2 phosphate groups, separated by the proper number (3) of C atoms.
IT 18558-51-5
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with Wassermann antibody)
RN 18558-51-5 CAPLUS
CN Palmitin, 1,2-di-, dihydrogen phosphate, methylene ester, disodium salt, DL- (8CI) (CA INDEX NAME)

PAGE 1-A





—$(CH_2)_{14}$—Me

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L5           0 L3 AND NANOPARTICLE

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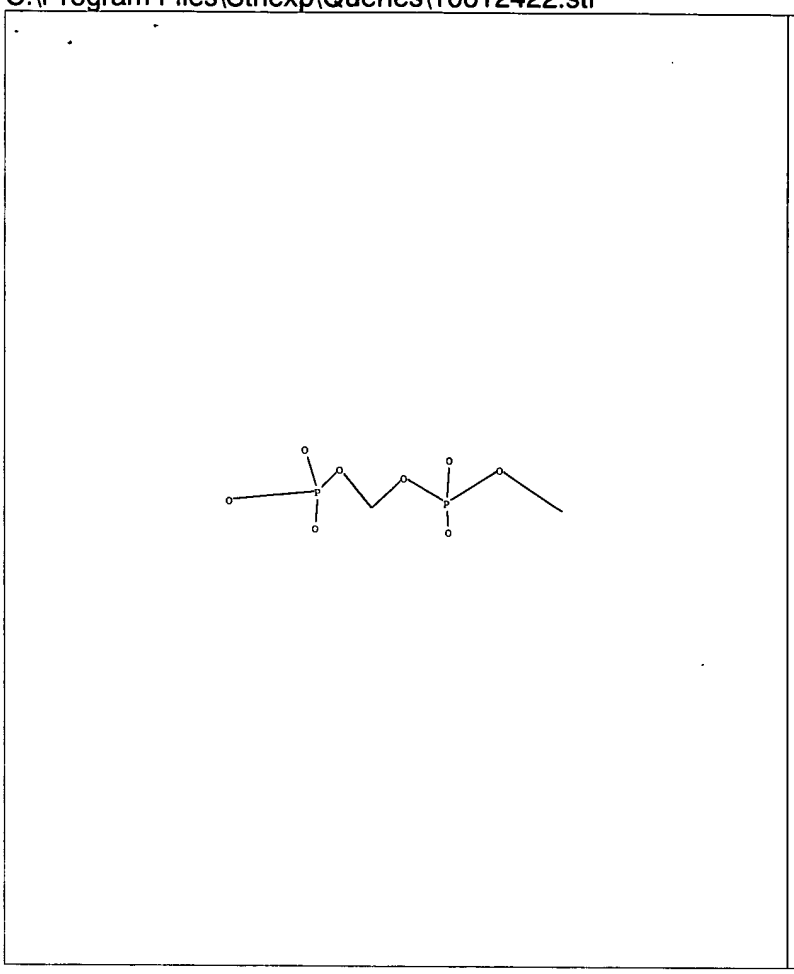

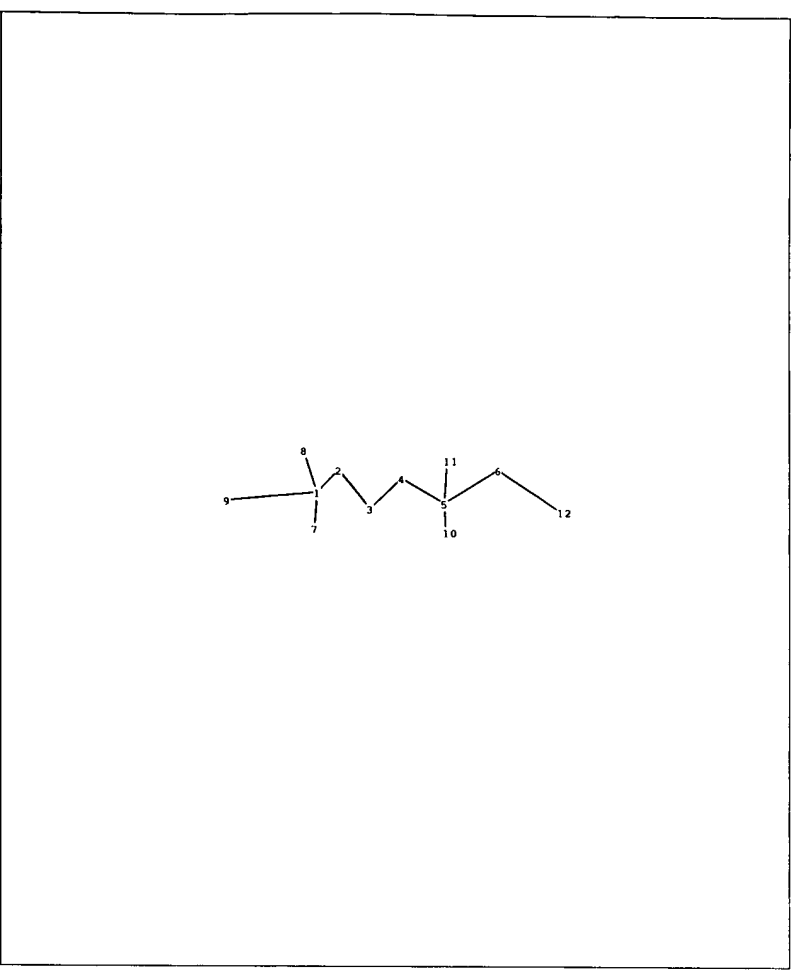

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1 2 3 4 5 6 7 8 9 10 11 12
chain bonds :
1-2 1-7 1-8 1-9 2-3 3-4 4-5 5-6 5-10 5-11 6-12
exact/norm bonds :
1-2 1-7 1-8 1-9 2-3 3-4 4-5 5-6 5-10 5-11 6-12

Match level :
1:CLASS2:CLASS3:CLASS4:CLASS5:CLASS6:CLASS7:CLASS8:CLASS9:CLASS10:CLASS11:CLASS12:CLASS

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=> file biosis medline caplus wpids uspatfull
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FULL ESTIMATED COST                                        32.25     204.56

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)              SINCE FILE      TOTAL
                                                           ENTRY    SESSION
CA SUBSCRIBER PRICE                                        -3.90      -3.90

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FILE 'USPATFULL' ENTERED AT 15:58:44 ON 25 MAR 2007
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*** YOU HAVE NEW MAIL ***

=> s nanoparticle
L6       60115 NANOPARTICLE

=> s polyanion? (4a) conjugate?
L7         204 POLYANION? (4A) CONJUGATE?

=> s l1 and l2
SUBSTANCE QUERIES NOT VALID IN THIS FILE
The logic expression entered contains L#s or saved query names which
correspond to structures built by the STRUCTURE command or to screen
sets.  These must be searched in a substance file such as the REGISTRY
file.  In some files you may use a Registry Number answer set from a
structure search as a search term or profile in some bibliographic
file containing Registry Numbers, e.g.  the CA file.  For an
explanation, enter "HELP CROSSOVER" at an arrow prompt (=>).

=> s l6 and l7
L8          10 L6 AND L7

=> s l8 and plurality
L9           4 L8 AND PLURALITY

=> d l9 bib abs 1-4

L9   ANSWER 1 OF 4  USPATFULL on STN
AN     2005:305453  USPATFULL
TI     Nanoparticular targeting and therapy
IN     Prokop, Ales, Nashville, TN, UNITED STATES
       Davidson, Jeffrey M., Nashville, TN, UNITED STATES
       Carlesso, Gianluca, Nashville, TN, UNITED STATES
       Roberts, David, Bethesda, MD, UNITED STATES
PI     US 2005266090       A1  20051201
AI     US 2005-125438      A1  20050510 (11)
RLI    Continuation-in-part of Ser. No. US 2004-833370, filed on 28 Apr 2004,
       PENDING
PRAI   US 2003-466375P     20030429 (60)
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DT Utility
FS APPLICATION
LREP Benjamin Aaron Adler, ADLER & ASSOCIATES, 8011 Candle Lane, Houston, TX, 77071, US
CLMN Number of Claims: 34
ECL Exemplary Claim: 1
DRWN 1 Drawing Page(s)
LN.CNT 1384
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides biocompatible, low molecular weight nanoparticulate formulations that are designed to retain and deliver therapeutics over an extended time course. The therapeutic may be conjugated or adsorbed to the periphery of the corona or conjugated to a core polymer. The nanoparticles comprise targeting ligands also conjugated or adsorbed to the periphery of the corona and/or a contrast agent in the core of the nanoparticle. As such, methods of selective targeting and/or methods of noninvasive imaging using bioluminescence and/or magnetic resonance imaging. Also provided are methods of delivering to and, optionally, imaging of a cell or tissue. Further provided are methods of producing the nanoparticles in batch or continuous mode via simple mixing or laminar flow.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 2 OF 4 USPATFULL on STN
AN 2005:124414 USPATFULL
TI Electrical contacts for molecular electronic transistors
IN Aviram, Ari, Croton On Hudson, NY, UNITED STATES
PI US 2005106804 A1 20050519
US 6989290 B2 20060124
AI US 2003-714083 A1 20031115 (10)
DT Utility
FS APPLICATION
LREP Ari Aviram, 444 Bramblebush Road, Croton On Hudson, NY, 10520, US
CLMN Number of Claims: 19
ECL Exemplary Claim: 1
DRWN 5 Drawing Page(s)
LN.CNT 725
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Electronic circuits based on molecular transistors, generally used in place of semiconductors. More particularly, the invention relates to a unique method of wiring of a three-terminal molecule (or an aggregate thereof) to serve as an electronic transistor, containing a gate electrode, a source electrode, and a drain electrode. The source electrode and drain electrode are fabricated from one metal and the gate electrode is fabricated from another metal. The usage of molecular properties in this context provides significant advantages over the fabrication methods of the prior art.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 3 OF 4 USPATFULL on STN
AN 2005:69028 USPATFULL
TI Conformationally flexible cationic conjugated polymers
IN Bazan, Guillermo C., Santa Barbara, CA, UNITED STATES
Liu, Bin, Goleta, CA, UNITED STATES
PA The Regents of the University of California, Oakland, CA (U.S. corporation)
PI US 2005059168 A1 20050317
US 7144950 B2 20061205
AI US 2003-666333 A1 20030917 (10)
DT Utility
FS APPLICATION
LREP Bingham McCutchen LLP, Suite 1800, Three Embarcadero Center, San

Francisco, CA, 94111-4067
CLMN Number of Claims: 42
ECL Exemplary Claim: 1
DRWN 10 Drawing Page(s)
LN.CNT 2010
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Methods, compositions and articles of manufacture involving cationic conjugated conformationally flexible polymers are provided. A method for the synthesis of cationic water-soluble polymers with linkages along the polymer main chain structure which disrupt the ability of the polymers to form extended-rod structures is provided. Such polymers may serve in the fabrication of novel optoelectronic devices and in the development of highly efficient biosensors. The invention further relates to the application of these polymers in assay methods.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 4 OF 4 USPATFULL on STN
AN 2004:69995 USPATFULL
TI Nanoparticle polyanion conjugates and methods of use thereof in detecting analytes
IN Storhoff, James J., Evanston, IL, UNITED STATES
Letsinger, Robert L., Bloomington, IN, UNITED STATES
Hagenow, Susan R., Salem, WI, UNITED STATES
PA Nanosphere, Inc. (U.S. corporation)
PI US 2004053222 A1 20040318
AI US 2003-612422 A1 20030702 (10)
PRAI US 2002-393255P 20020702 (60)
DT Utility
FS APPLICATION
LREP Emily Miao, McDonnell Boehnen Hulbert & Berghoff, 32nd Floor, 300 S. Wacker Drive, Chicago, IL, 60606
CLMN Number of Claims: 50
ECL Exemplary Claim: 1
DRWN 6 Drawing Page(s)
LN.CNT 1179
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention provides polyanionic polymer conjugates containing non-nucleotide polyanionic polymers that are useful in detecting target analytes such as proteins or small molecules. The invention also provides nanoparticles bound to polyanionic polymer conjugates and methods of preparation and use thereof. The polyanionic polymer conjugates have the formula:

L--O--[PO.sub.2--O--Z--O].sub.n--PO.sub.2--O--X

wherein n ranges from 1 to 200; L represents a moiety comprising a functional group for attaching the polyanion polymer to the nanoparticle surface; Z represents a bridging group, and X represents Q, X' or --Q--X', wherein Q represents a functional group for attaching a recognition probe to the polyanion polymer, and X' represents a recognition probe.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=>

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FILE 'HOME' ENTERED AT 16:37:21 ON 25 MAR 2007

=>  file biosis medline caplus wpids uspatfull
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                     0.21       0.21

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*** YOU HAVE NEW MAIL ***

=> s nanoparticle (7a) polyanion?
L1          30 NANOPARTICLE (7A) POLYANION?

=> s l1 and phopho?
L2           0 L1 AND PHOPHO?

=>
<------User Break------>

=> s l1 and phospho?
L3          17 L1 AND PHOSPHO?

=> s l3 and polymer?
L4          17 L3 AND POLYMER?

=> s l4 and (link? or bridg? ) (3a) group?
L5          10 L4 AND (LINK? OR BRIDG? ) (3A) GROUP?

=> dup rem l5
PROCESSING COMPLETED FOR L5
L6            9 DUP REM L5 (1 DUPLICATE REMOVED)

=> d l6 bib abs 1-9

L6   ANSWER 1 OF 9  USPATFULL on STN
AN     2007:42169  USPATFULL
TI     Endosomolytic Polymers
IN     Rozema, David B., 9418 Whippoorwill Way, Middleton, WI, UNITED STATES
       53562
       Wakefield, Darren H., 2790 Lyman Lane, Fitchburg, WI, UNITED STATES
       53711
       Wolff, Jon A., 1122 University Bay Drive, Madison, WI, UNITED STATES
       53705
       Budker, Vladimir G., Middleton, WI, UNITED STATES
       Budker, Tatyana, Middleton, WI, UNITED STATES  legal representative
       Monahan, Sean D., Mazomanie, WI, UNITED STATES
       Trubetskoy, Vladimir, Middleton, WI, UNITED STATES
       Hagstrom, James E., Middleton, WI, UNITED STATES
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Loomis, Aaton G., Prairie du Sac, WI, UNITED STATES
Slattum, Paul M., Cottonwood Heights, UT, UNITED STATES
PA MIRUS BIO CORPORATION, Madison, WI, UNITED STATES (U.S. corporation)
PI US 2007036865 A1 20070215
AI US 2006-533115 A1 20060919 (11)
RLI Continuation-in-part of Ser. No. US 2003-619778, filed on 15 Jul 2003, GRANTED, Pat. No. US 7138382 Continuation-in-part of Ser. No. US 2004-816081, filed on 1 Apr 2004, PENDING Division of Ser. No. US 2000-589978, filed on 7 Jun 2000, GRANTED, Pat. No. US 6630351
DT Utility
FS APPLICATION
LREP MIRUS CORPORATION, 505 SOUTH ROSA RD, MADISON, WI, 53719, US
CLMN Number of Claims: 20
ECL Exemplary Claim: 1
DRWN 3 Drawing Page(s)
LN.CNT 947
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB We describe pH-sensitive endosomolytic polymers, delivery particles containing pH-sensitive endosomolytic polymers. The described particles are capable of delivering polynucleotides to cells from the peripheral circulation with subsequent release from endosomes. The endosomolytic polymers are inactive outside the cell but disrupt membranes upon exposure to an acidified endosomal compartment.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 2 OF 9 USPATFULL on STN
AN 2006:254317 USPATFULL
TI Dioxetane-nanoparticle assemblies for energy transfer detection systems, methods of making the assemblies, and methods of using the assemblies in bioassays
IN Sparks, Alison, N. Andover, MA, UNITED STATES
Wang, Zhixian, Winchester, MA, UNITED STATES
Edwards, Brooks, Cambridge, MA, UNITED STATES
Juo, Rouh-Rong, Allston, MA, UNITED STATES
PI US 2006216768 A1 20060928
AI US 2005-221895 A1 20050909 (11)
PRAI US 2004-608130P 20040909 (60)
DT Utility
FS APPLICATION
LREP MERCHANT & GOULD PC, P.O. BOX 2903, MINNEAPOLIS, MN, 55402-0903, US
CLMN Number of Claims: 31
ECL Exemplary Claim: 1
DRWN 15 Drawing Page(s)
LN.CNT 1067
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Assemblies comprising nanoparticles and chemiluminescent substrates such as dioxetanes are provided. The assemblies can be used in assays to detect the presence and/or amount of a single analyte or multiple analytes in a sample. Methods of making the assemblies are also described.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 3 OF 9 USPATFULL on STN
AN 2005:293810 USPATFULL
TI Methods of enhancing radiation effects with metal nanoparticles
IN Hainfeld, James F., Shorchsm, NY, UNITED STATES
Slatkin, Daniel N., Southold, NY, UNITED STATES
PI US 2005256360 A1 20051117
AI US 2005-186675 A1 20050721 (11)
RLI Continuation of Ser. No. US 2003-387059, filed on 12 Mar 2003, PENDING
DT Utility
FS APPLICATION

LREP Frank S. DiGiglio, Esq., SCULLY, SCOTT, MURPHY & PRESSER, 400 Garden City Plaza, Garden City, NY, 11530, US
CLMN Number of Claims: 44
ECL Exemplary Claim: 1
DRWN 2 Drawing Page(s)
LN.CNT 1449
AB The present invention provides methods of using metal nanoparticles 0.5 to 400 nm in diameter to enhance the dose and effectiveness of x-rays or of other kinds of radiation in therapeutic regimes of ablating a target tissue such as tumor. The metal nanoparticles can be administered intravenously, intra-arterially, or locally to achieve specific loading in and around the target tissue. The metal nanoparticles can also be linked to chemical and/or biochemical moieties which bind specifically to the target tissue. The enhanced radiation methods can also be applied to ablate unwanted tissues or cells ex vivo.

L6 ANSWER 4 OF 9 USPATFULL on STN
AN 2005:183376 USPATFULL
TI Aligned long DNA molecules on templates and methods for preparing
IN Ivanisevic, Albena, West Lafayette, IN, UNITED STATES
Nyamjav, Dorjderem, Logan, UT, UNITED STATES
Kinsella, Joseph Matthew, West Lafayette, IN, UNITED STATES
PI US 2005158763 A1 20050721
AI US 2004-15121 A1 20041217 (11)
PRAI US 2003-531352P 20031219 (60)
DT Utility
FS APPLICATION
LREP BARNES & THORNBURG, 11 SOUTH MERIDIAN, INDIANAPOLIS, IN, 46204, US
CLMN Number of Claims: 21
ECL Exemplary Claim: 1
DRWN 4 Drawing Page(s)
LN.CNT 1328
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present disclosure describes methods for aligning nucleic acid molecules in a predetermined configuration on a solid surface. In one illustrative embodiment, DNA is coated with metallic nanoparticles and the coated DNA is positioned on a solid support in a controlled manner.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 5 OF 9 USPATFULL on STN
AN 2005:24319 USPATFULL
TI Methods of enhancing radiation effects with metal nanoparticles
IN Hainfeld, James F., Shoreham, NY, UNITED STATES
Slatkin, Daniel N., Essex, CT, UNITED STATES
PI US 2005020869 A1 20050127
AI US 2003-705614 A1 20031110 (10)
RLI Continuation-in-part of Ser. No. US 2003-387059, filed on 12 Mar 2003, PENDING Continuation-in-part of Ser. No. US 1999-363204, filed on 29 Jul 1999, GRANTED, Pat. No. US 6645464
PRAI US 1998-94669P 19980730 (60)
DT Utility
FS APPLICATION
LREP SCULLY SCOTT MURPHY & PRESSER, PC, 400 GARDEN CITY PLAZA, GARDEN CITY, NY, 11530
CLMN Number of Claims: 43
ECL Exemplary Claim: 1
DRWN 2 Drawing Page(s)
LN.CNT 1532
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides methods of using metal nanoparticles 0.5 to 400 nm in diameter to enhance the dose and effectiveness of x-rays or of other kinds of radiation in therapeutic regimes of ablating a target

tissue, such as tumor. The metal nanoparticles can be administered intravenously, intra-arterially, or locally to achieve specific loading in and around the target tissue. The metal nanoparticles can also be linked to chemical and/or biochemical moieties which bind specifically to the target tissue. The enhanced radiation methods can also be applied to ablate unwanted tissues or cells ex vivo.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 1
AN 2004:41216 CAPLUS
DN 140:90328
TI Nanoparticle polyanion conjugates and methods of use thereof in detecting analytes
IN Storhoff, James J.; Letsinger, Robert L.; Hagenow, Susan R.
PA Nanosphere Inc., USA
SO PCT Int. Appl., 36 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004004647	A2	20040115	WO 2003-US21021	20030702
	WO 2004004647	A3	20040325		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	CA 2490413	A1	20040115	CA 2003-2490413	20030702
	AU 2003247788	A1	20040123	AU 2003-247788	20030702
	US 2004053222	A1	20040318	US 2003-612422	20030702
	EP 1540006	A2	20050615	EP 2003-763192	20030702
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	JP 2005532456	T	20051027	JP 2004-519869	20030702
PRAI	US 2002-393255P	P	20020702		
	WO 2003-US21021	W	20030702		

AB This invention provides polyanionic polymer conjugates containing non-nucleotide polyanionic polymers that are useful in detecting target analytes such as proteins or small mols. The invention also provides nanoparticle bound to polyanionic polymer conjugates and methods of preparation and use thereof. The polyanionic polymer conjugates have the formula: L-O[PO2-O-Z-O]n-PO2-O-X (I), wherein n ranges from 1 to 200; L represents a moiety comprising a functional group for attaching the polyanion polymer to the nanoparticle surface; Z represents a bridging group, and X represents Q, X', or -Q-X',, wherein Q represents a functional group for attaching a recognition probe to the polyanion polymer, and X' represents a recognition probe. I, prepared using standard phosphoramidite chemical, was conjugated to 30 nm diameter gold particles and used to detect streptavidin.

L6 ANSWER 7 OF 9 USPATFULL on STN
AN 2004:255157 USPATFULL
TI Endosomolytic polymers
IN Rozema, David B., Madison, WI, UNITED STATES
Wakefield, Darren, Fitchburg, WI, UNITED STATES

Wolff, Jon A., Madison, WI, UNITED STATES
Trubetskoy, Vladimir, Middleton, WI, UNITED STATES
Budker, Vladimir G., Middleton, WI, UNITED STATES
Hagstrom, James E., Middleton, WI, UNITED STATES
Loomis, Aaron G., Prairie du Sac, WI, UNITED STATES
Monahan, Sean D., Madison, WI, UNITED STATES
Slattum, Paul M., Madison, WI, UNITED STATES
PI US 2004198687 A1 20041007
AI US 2004-816081 A1 20040401 (10)
PRAI US 2003-460455P 20030404 (60)
DT Utility
FS APPLICATION
LREP Mark K. Johnson, Mirus, 505 S. South Rosa Road, Madison, WI, 53719
CLMN Number of Claims: 23
ECL Exemplary Claim: 1
DRWN 3 Drawing Page(s)
LN.CNT 945
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB We describe pH-sensitive endosomolytic polymers, delivery particles containing pH-sensitive endosomolytic polymers. The described particles are capable of delivering polynucleotides to cells from the peripheral circulation with subsequent release from endosomes. The endosomolytic polymers are inactive outside the cell but disrupt membranes upon exposure to an acidified endosomal compartment.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 8 OF 9 USPATFULL on STN
AN 2004:234040 USPATFULL
TI Methods of enhancing radiation effects with metal nanoparticles
IN Hainfeld, James F., Shorcham, NY, UNITED STATES
Slatkin, Daniel N., Southold, NY, UNITED STATES
PI US 2004181114 A1 20040916
US 6955639 B2 20051018
AI US 2003-387059 A1 20030312 (10)
DT Utility
FS APPLICATION
LREP SCULLY SCOTT MURPHY & PRESSER, PC, 400 GARDEN CITY PLAZA, GARDEN CITY, NY, 11530
CLMN Number of Claims: 41
ECL Exemplary Claim: 1
DRWN 2 Drawing Page(s)
LN.CNT 1440
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides methods of using metal nanoparticles 0.5 to 400 nm in diameter to enhance the dose and effectiveness of x-rays or of other kinds of radiation in therapeutic regimes of ablating a target tissue such as tumor. The metal nanoparticles can be administered intravenously, intra-arterially, or locally to achieve specific loading in and around the target tissue. The metal nanoparticles can also be linked to chemical and/or biochemical moieties which bind specifically to the target tissue. The enhanced radiation methods can also be applied to ablate unwanted tissues or cells ex vivo.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 9 OF 9 USPATFULL on STN
AN 2004:69995 USPATFULL
TI Nanoparticle polyanion conjugates and methods of use thereof in detecting analytes
IN Storhoff, James J., Evanston, IL, UNITED STATES
Letsinger, Robert L., Bloomington, IN, UNITED STATES
Hagenow, Susan R., Salem, WI, UNITED STATES
PA Nanosphere, Inc. (U.S. corporation)

PI US 2004053222 A1 20040318
AI US 2003-612422 A1 20030702 (10)
PRAI US 2002-393255P 20020702 (60)
DT Utility
FS APPLICATION
LREP Emily Miao, McDonnell Boehnen Hulbert & Berghoff, 32nd Floor, 300 S. Wacker Drive, Chicago, IL, 60606
CLMN Number of Claims: 50
ECL Exemplary Claim: 1
DRWN 6 Drawing Page(s)
LN.CNT 1179

AB This invention provides polyanionic polymer conjugates containing non-nucleotide polyanionic polymers that are useful in detecting target analytes such as proteins or small molecules. The invention also provides nanoparticles bound to polyanionic polymer conjugates and methods of preparation and use thereof. The polyanionic polymer conjugates have the formula:

L--O--[PO.sub.2--O--Z--O].sub.n--PO.sub.2--O--X

wherein n ranges from 1 to 200; L represents a moiety comprising a functional group for attaching the polyanion polymer to the nanoparticle surface; Z represents a bridging group, and X represents Q, X' or --Q--X', wherein Q represents a functional group for attaching a recognition probe to the polyanion polymer, and X' represents a recognition probe.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.